

**REMARKS**

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

**Status of the claims**

Claims 1-55 were pending in the subject application with claims 40-55 having been withdrawn from consideration by the Examiner. With this submission, claims 1, 18, and 24 have been amended to incorporate the language of original claim 7, which has therefore been canceled. No new claims have been added.

Therefore, upon entry of this paper, claims 1-6, and 8-55 will remain pending, and claims 1-6, and 8-39 will remain under active consideration.

**Claim rejections under 35 U.S.C. § 112, first paragraph**

Claims 1-39 stand rejected under the first paragraph of 35 U.S.C. § 112 for allegedly failing to comply with the written description requirement. The Examiner alleges that the language “wherein the blood flows through the in-line screen capturing device at a rate determined by gravity” - entered with the last Response - contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicants respectfully disagree with the Examiner, but in the interest of speeding prosecution of the present application, Applicants have amended the recitation to “wherein the flow rate of the blood flowing through the in-line screening device is equal to the flow rate of blood collected in the absence of the device.” Express support for this amendment may be found at paragraph 0043 of the original specification. In view of this amendment, Applicants respectfully submit that the present rejection is moot and should be withdrawn.

**Claim rejections under 35 U.S.C. § 103**

**1. Liu in view of Nelson**

Claims 1-6, 10-18 and 22-39 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over USP No. 6,924,107 to Liu (“Liu”) in view of USP No. 6,074,827 to Nelson *et al.* (“Nelson”). The Examiner acknowledges that the “flow rate” limitation of the claimed invention is not disclosed by Liu, and for this reason, has combined the teaching of Nelson, for the alleged proposition that a “in some configurations, [a microfluidic device] may be sufficient to allow the sample to flow through the device as a result of gravity forces on the sample.” Page 5, para. 1. The Examiner has concluded that “the skilled artisan would thus have modified the Liu device accordingly.”

Applicants respectfully submit that the present combination of references is impermissible and therefore respectfully traverse the rejection. Traversal is based on the grounds that a proposed modification of a prior art reference cannot render the prior art unsatisfactory for its intended purpose. M.P.E.P. § 2143.01(V) (stating “[i]f proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then *there is no suggestion or motivation to make the proposed modification.*”)(Emphasis added.)

In the present case, similarly, Liu teaches a device that cannot achieve any of the flow rates for in-line screening of blood that are described in paragraph [0043] and recited in claims. Liu’s device, in fact, is *designed* “to reduce the volume of the biosample solution in each [successive] capillary” by configuring subsequent arrayer capillaries “to have a smaller diameter than the [previous] arrayer capillaries.” Col. 11, lines 57-67; and col. 12, lines 1-9. Of most significance, Liu’s device is so designed in order to achieve “a higher effective hybridization, [which] reduces the amount of probe solution required to perform the assay.” Sentence bridging cols. 9-10.

Hence, not only would the modification proposed by the Examiner render the Liu device unsatisfactory for its intended purpose, the modification would necessarily change the very principle by which the Liu device operates. This fact, too, renders that present combination of references impermissible. M.P.E.P. § 2143.01(VI) (providing that “[i]f the proposed modification or combination of the prior art would change the principle of operation

of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.”)

## **2. Liu in view of Nelson and Narang**

Claims 7-9, 19 and 21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Liu and Nelson, in further view of USP No. 6,020,209 to Narang *et al.* (“Narang”). Applicants respectfully submit that this combination of references does not teach or suggest each and every feature of the claimed invention. As explained above, Liu’s device does not permit the flow of blood through the screening device as instantly claimed. To the extent that Nelson may cure this deficiency, if at all, the combination is improper for the reasons discussed above. Narang fails to remedy the deficiency of Liu. In fact, Narang, as noted by the Examiner, teaches the use of pumps to artificially control the flow of fluid. Office Action, page 12 (citing Narang, col. 5, lines 57-59).

Hence, Applicants respectfully request withdrawal of the § 103 rejections over Liu in view of Nelson and Narang.

## **3. Liu in view of Nelson, Bashir and Yamanishi**

Claim 20 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Liu in view Nelson, in further in view of U.S. App. Pub. No. 2001/0053535 to Bashir *et al.* (“Bashir”) and U.S. App. Pub. No. 2003/0134416 to Yamanishi *et al.* (“Yamanishi”). Applicants respectfully submit that the combination of Liu, Nelson, Bashir and Yamanishi does not satisfy the requirements for a *prima facie* at least because the combination is improper and/or does not teach or suggest each and every feature of the claimed invention (*i.e.*, the “flow rate” limitation). Therefore, the instant combination of references cannot render claim 20 obvious.

Accordingly, Applicants respectfully request withdrawal of the § 103 rejection over Liu in view of Nelson, Bashir and Yamanishi.

## **Conclusion**

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested. The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

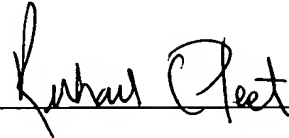
The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date June 9, 2009

FOLEY & LARDNER LLP  
Customer Number: 27476  
Telephone: (202) 672-5483  
Facsimile: (202) 672-5399

By

A handwritten signature in black ink, appearing to read "Richard C. Peet", is written over a horizontal line.

Richard C. Peet, Ph.D.  
Registration No. 35,792  
Sunit Talapatra, Ph.D.  
Registration No. 54,482